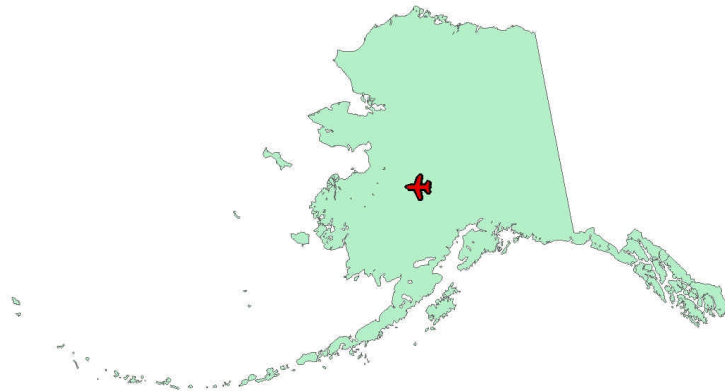




McGRATH AIRPORT



2004 Alaska Airport Pavement Condition Report

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Maps and report compiled by
H. June Finkbiner
Central Region Materials, Alaska DOT&PF

McGRATH AIRPORT - 2004

Contents:

- A Pavement Strength Form showing project history, latest Pavement Condition Index (PCI) data, pavement strength ratings (if available) and other useful information
- A Pavement Condition Survey – PCI Sample Unit Layout Plan
- PCI maps showing as-measured and predicted pavement conditions
- Age map showing pavement age as of January 2004
- A Branch PCI Condition Report
- A Section PCI Condition Report

Airport Information:

- Location: McGrath Airport is located in Southwest interior Alaska running along the Kuskokwim River on the west side of town. The airport is approximately 125 air miles southwest of Mt. McKinley.
- District: Matsu District, Central Region
- Airport Manager: Doug Lyman
- District Maintenance Manager: Kurt Devon
- Pavement Surface: Asphalt Concrete
- Last Pavement Construction:
 - 2001: Runway 16-34 reconstruction, Taxiways and East Ramp paving
- Pavement layout: 2 Runways 16-34 and 7-25, 6 taxiways and 3 Aprons.
- Design Aircraft: Boeing 737-100
- 2003 Enplanements: 4,582 – down 18% from 2002
- Airport Class: Non-Primary
- Last pavement condition survey: June 3, 2003
- Next planned pavement condition survey: 2006
- 2003 reported pavement maintenance and/or changed conditions: No pavement maintenance was done. A new tar pot is expected so that rubberized crack sealant can be placed in the spring of 2005. Some cracks are opening up in Runway 16-34. The east end of Runway 7-25 and Taxiway B are failing with potholes showing up. A project is in design for reconstruction of these and the Northeast Ramp. The DNR has done pavement maintenance on the west side of the Retardant Ramp bringing it up to fair shape.

Recommendations:

- Crack seal and patch as needed
- Reconstruct:
 - West end of R/ 7-25
 - Taxiway B
 - North Ramp

Date: 7 /24/2003

Branch Condition Report

1 of 2

Pavement Database: NetworkID: McGrath

Branch ID	Number of Sections	Sum Section Length (Ft)	Avg Section Width (Ft)	True Area (SqFt)	Use	Average PCI	PCI Standard Deviation	Weighted Average PCI
100 (Taxiway A)	1	415.00	94.00	95458.00	TAXIWAY	93.00	0.00	93.00
1000 (Taxiway J)	1	485.00	70.00	70527.00	TAXIWAY	98.00	0.00	98.00
200 (Taxiway B)	3	3580.00	33.33	131000.00	TAXIWAY	11.00	12.08	23.74
300 (South Turn Around)	1	280.00	70.00	29572.00	TAXIWAY	99.00	0.00	99.00
400 (Taxiway D-North Turn Around)	1	450.00	70.00	33110.00	TAXIWAY	91.00	0.00	91.00
4100 (North Ramp)	1	500.00	120.00	60000.00	APRON	24.00	0.00	24.00
4200 (Retardant Ramp)	2	1050.00	120.00	126000.00	APRON	48.50	47.50	48.50
4300 (East Ramp)	1	830.00	286.00	237380.00	APRON	91.00	0.00	91.00
6100 (Runway 16/34)	1	5956.00	100.00	595599.99	RUNWAY	88.00	0.00	88.00
6200 (Runway 7/25)	4	3951.00	50.00	174400.00	RUNWAY	34.75	33.60	49.92
900 (Taxiway I)	1	485.00	70.00	71386.00	TAXIWAY	95.00	0.00	95.00

Date: 7 /24/2003

Branch Condition Report

2 of 2

Pavement Database:

Use Category	Number of Sections	Total Area (SqFt)	Arithmetic Average PCI	Average PCI STD.	Weighted Average PCI
APRON	4	423380.00	53.00	41.35	68.86
RUNWAY	5	769999.99	45.40	36.83	79.38
TAXIWAY	8	431053.00	63.63	41.50	73.36
All	17	1624432.99	55.76	40.92	75.04

<div> <div>Date: 7 /24/2003</div> <div> <div>Section Condition Report</div> <div> Pavement Database: NetworkID: McGrath </div> </div> <div>1 of 2</div> </div>										
Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
100 (Taxiway A)	100-01	08/01/2001	AC	TAXIWAY	S	0	95458.00	06/03/2003	2	93.00
1000 (Taxiway J)	1000-01	08/01/2001	AAC	TAXIWAY	S	0	70527.00	06/03/2003	2	98.00
200 (Taxiway B)	200-01	06/15/1966	AC	TAXIWAY	S	0	13600.00	06/03/2003	37	4.00
200 (Taxiway B)	200-02	06/15/1976	AC	TAXIWAY	P	0	108800.00	06/03/2003	27	28.00
200 (Taxiway B)	200-03	06/15/1966	AC	TAXIWAY	S	0	8600.00	06/03/2003	37	1.00
300 (South Turn Around)	300-01	08/01/2001	AC	TAXIWAY	P	0	29572.00	06/03/2003	2	99.00
400 (Taxiway D-North Turn Around)	400-01	08/01/2001	AC	TAXIWAY	S	0	33110.00	06/03/2003	2	91.00
4100 (North Ramp)	4100-01	06/15/1976	AC	APRON	P	0	60000.00	06/03/2003	27	24.00
4200 (Retardant Ramp)	4200-01	06/15/1966	AC	APRON	T	0	63000.00	06/03/2003	37	1.00
4200 (Retardant Ramp)	4200-02	08/01/2001	AAC	APRON	S	0	63000.00	06/03/2003	2	96.00
4300 (East Ramp)	4300-01	08/01/2001	AC	APRON	P	0	237380.00	06/03/2003	2	91.00
6100 (Runway 16/34)	6100-01	08/01/2001	AC	RUNWAY	P	0	595599.99	06/03/2003	2	88.00
6200 (Runway 7/25)	6200-05	06/15/1966	AC	RUNWAY	S	0	10180.00	06/03/2003	37	16.00
6200 (Runway 7/25)	6200-06	06/15/1976	AAC	RUNWAY	P	0	81440.00	06/03/2003	27	24.00
6200 (Runway 7/25)	6200-07	06/15/1966	AC	RUNWAY	S	0	12080.00	06/03/2003	37	7.00
6200 (Runway 7/25)	6200-08	08/01/2001	AC	RUNWAY	P	0	70700.00	06/03/2003	2	92.00
900 (Taxiway I)	900-01	08/01/2001	AAC	TAXIWAY	S	0	71386.00	06/03/2003	2	95.00

Date: 7 /24/2003

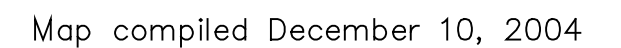
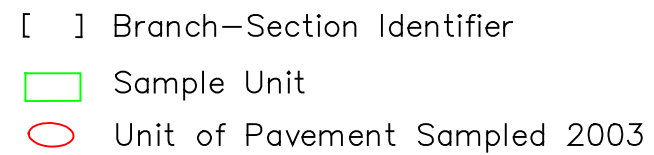
Section Condition Report

2 of 2

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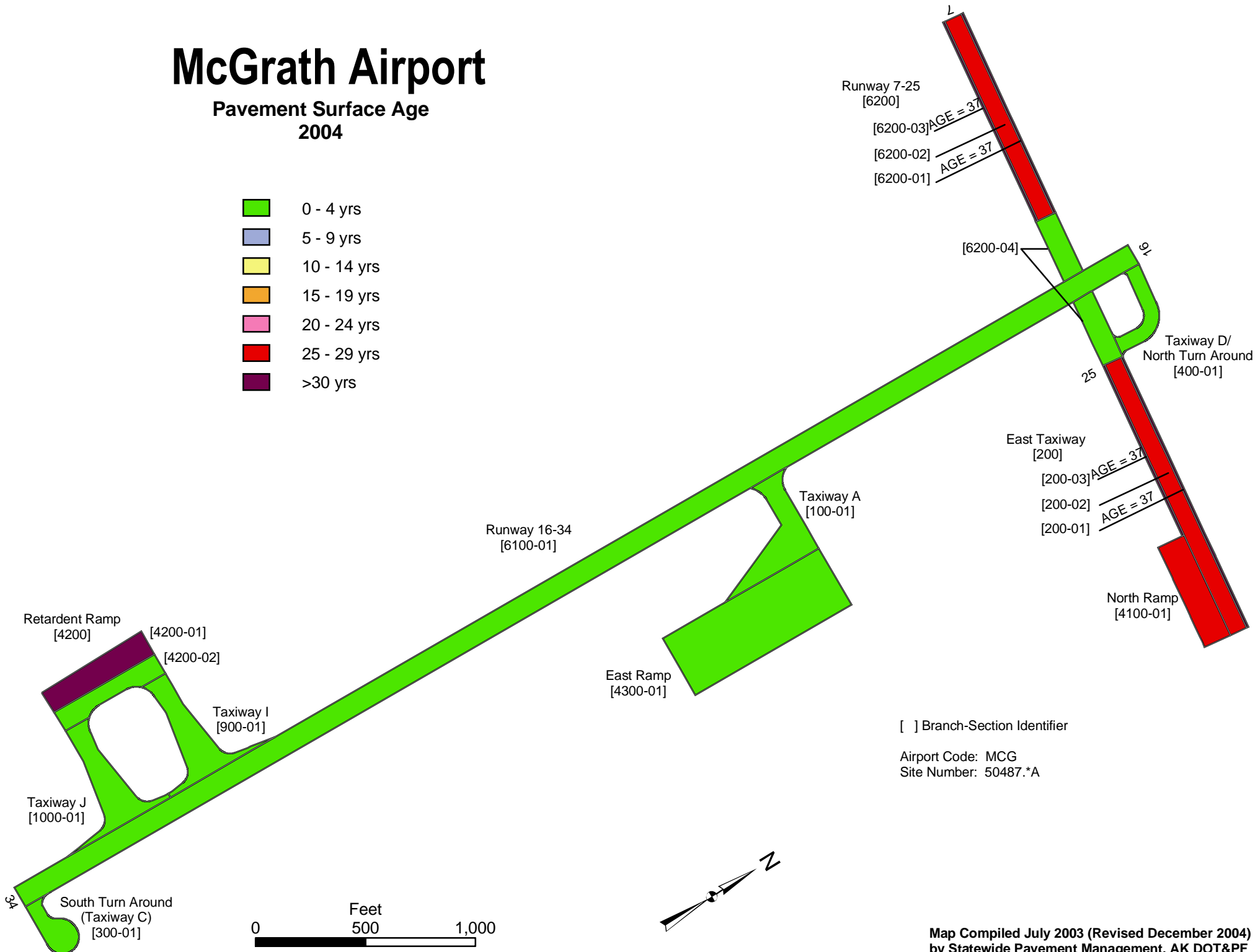
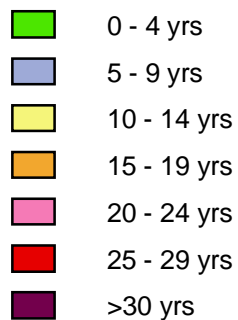
Age Category	Average Age At Inspection	Total Area (SqFt)	Number of Sections	Arithmetic Average PCI	PCI Standard Deviation	Weighted Average PCI
0-02	2.00	1266732.99	9	93.67	3.40	90.85
26-30	27.00	250240.00	3	25.33	1.89	25.74
36-40	37.00	107460.00	5	5.80	5.56	3.48
All	16.71	1624432.99	17	55.76	40.92	75.04

PAVEMENT STRENGTH SURVEY													
STATE Alaska		CITY	McGarth	AIRPORT	McGarth	This is a variation of FAA Form 5320-1-1							
		CONSTRUCTION DATES											
IDENT.	NAME	ORIG.	OVERLAY	CONSTRUCTION AGENCY	SOURCE OF INFORMATION	Existing Pavement Conditions (PCI) at last inspection	Soil Class	Subbase Course	Base Course	Surface Course	Overlay	Pavement Strength	
RUNWAYS													
6100-01	Runway 16-34	1942	2001	AK DOT&PF	AIP No. 3-02-0176-03, AS-BUILT	88		24	6" Crushed	2" Bit. Conc.			
6100-02	Runway 16-34, keel	1942	2001	AK DOT&PF	AIP No. 3-02-0176-03, AS-BUILT	100		16"	12" Crushed	4" Bit. Conc.		S32, T150, ST150	
6100-01	Runway 16-34	1942	2001	AK DOT&PF	AIP No. 3-02-0176-03, AS-BUILT	100		24	6" Crushed	2" Bit. Conc.			
6200-01	Runway 07-25, north edge	1942		CAA	McGrath Airport Study, Jan. 1971	16		0" to 12"	5"-9" Stabilized Base				
6200-02	Runway 07-25, keel	1942	1977	AK DOT&PF	ADAP No. 6-02-0176-01, AS-BUILT	24		0" to 12"	5"-9" Stabilized Base	1"-1.5" Cold-Mix		S32, T80, ST102	
6200-03	Runway 07-25, south edge	1942		CAA	McGrath Airport Study, Jan. 1971	7		0" to 12"	5"-9" Stabilized Base				
6200-04	Runway 07-25 intersection	1942	2001	AK DOT&PF	ADAP No. 6-02-0176-01, AS-BUILT	92		16"	12" Crushed	4" Bit. Conc.		S32, T150, ST150	
TAXIWAYS													
100-01	Taxiway A, mainline	1999	2001	AK DOT&PF	AIP No. 3-02-0176-03, AS-BUILT	93		24"	2" EATB 5"-7" Stabilized Base	3" Bit. Conc.		S32, T150, ST150	
200-01	Taxiway B, north edge	1942		CAA	McGrath Airport Study, Jan. 1971	4		5" to 12"	5"-7" Stabilized Base	1"-2.5" Cold-Mix			
200-02	Taxiway B, keel	1942	1977	AK DOT&PF	ADAP No. 6-02-0176-01, AS-BUILT	28		5" to 12"	5"-7" Stabilized Base	1"-2.5" Cold-Mix	2" Cold-Mix	S32, T80, ST102	
200-03	Taxiway B, south edge	1942		CAA	McGrath Airport Study, Jan. 1971	1		5" to 12"	5"-7" Stabilized Base	1"-2.5" Cold-Mix			
300-01	Taxiway C	2001	2001	AK DOT&PF	ADAP No. 6-02-0176-01, AS-BUILT	99		16"	12" Crushed	4" Bit. Conc.		S32, T150, ST150	
400-01	Taxiway D	2001	2001	AK DOT&PF	ADAP No. 6-02-0176-01, AS-BUILT	91		16"	12" Crushed	4" Bit. Conc.		S32, T150, ST150	
900-01	Taxiway I	unknown	2001	AK DOT&PF	AIP No. 3-02-0176-03, AS-BUILT	95		16"	12" crushed	4" Bit. Conc.		S32, T150, ST150	
1000-01	Taxiway J	unknown	2001	AK DOT&PF	ADAP No. 6-02-0176-01, AS-BUILT	98		16"	12" crushed	4" Bit. Conc.		S32, T150, ST150	
APRONS													
4100-01	Northeast Ramp	1942	1977	AK DOT&PF	ADAP No. 6-02-0176-01, AS-BUILT	24		6"	14" Stabilized Base Course		2" Cold-Mix	2" Cold-Mix	S32, T80, ST102
4200-02	DNR Apron, east edge	unknown	2001	AK DOT&PF	AIP No. 3-02-0176-03, AS-BUILT	96		none	none	5.5"-9.7" Cold-Mix	2" Bit. Conc.	S32, T80, ST102	
4200-01	DNR Apron, west side	unknown		DNR	See Remark 5.	1		none	none	5.5"-9.7" Cold-Mix		S32, T80, ST102	
4300-01	East Ramp	1999	2001	AK DOT&PF	AIP No. 3-02-0176-03, AS-BUILT	91		+24"	2" EATB	3" Bit. Conc.		S32, T150, ST150	
REMARKS:													
1. Runway 07-25 "Stabilized Base Course" consists of 4" to 7" of Sandy-Gravel on top of 1" to 2" of asphaltic mix. Reference January 1971, McGrath Airport Study.													
2. The East Taxiway "Stabilized Base Course" consists of 4" of Sandy-Gravel on top of 1" to 3" of asphaltic mix. Reference per 1.													
3. The Northeast Apron "Stabilized Base Course" consists of 10" Sandy-Gravel on top of 4" asphaltic mix. Reference T.H. 14 in 1.													
4. The 1977 Cold Mix overlay was constructed with ADAP No. 6-02-0176-01, AS-Built 12/1977.													
5. Surface Course thickness on the DNR Apron, Section 4200-03 are per "McGrath Runway Reconstruction Ground Penetrating Radar Study", August 1998.													
6. Pavement Strengths are per the Alaska Supplement, July 1997 and/or are estimates.													
7. McGrath Airport was originally paved in 1942. Records not available subsequent paving between 1942 and 1976.													
8. PCI estimates of 100 are shown for 2001 construction areas. Others are based on a 1998 survey. The next PCI survey is planned for 2003.													
9. Taxiway A and the East Ramp were constructed with Subbase and Emulsified Asphalt Treated Base (EATB) in 1999. The 2001 in these areas provided a Bituminous Concrete leveling course and 2" Bituminous Concrete Paver													
Last Inspected		6/3/2003		Evaluated by:		Scott Gartin, P.E.		11/29/2004				PAGE 1 of 1	











McGrath Airport

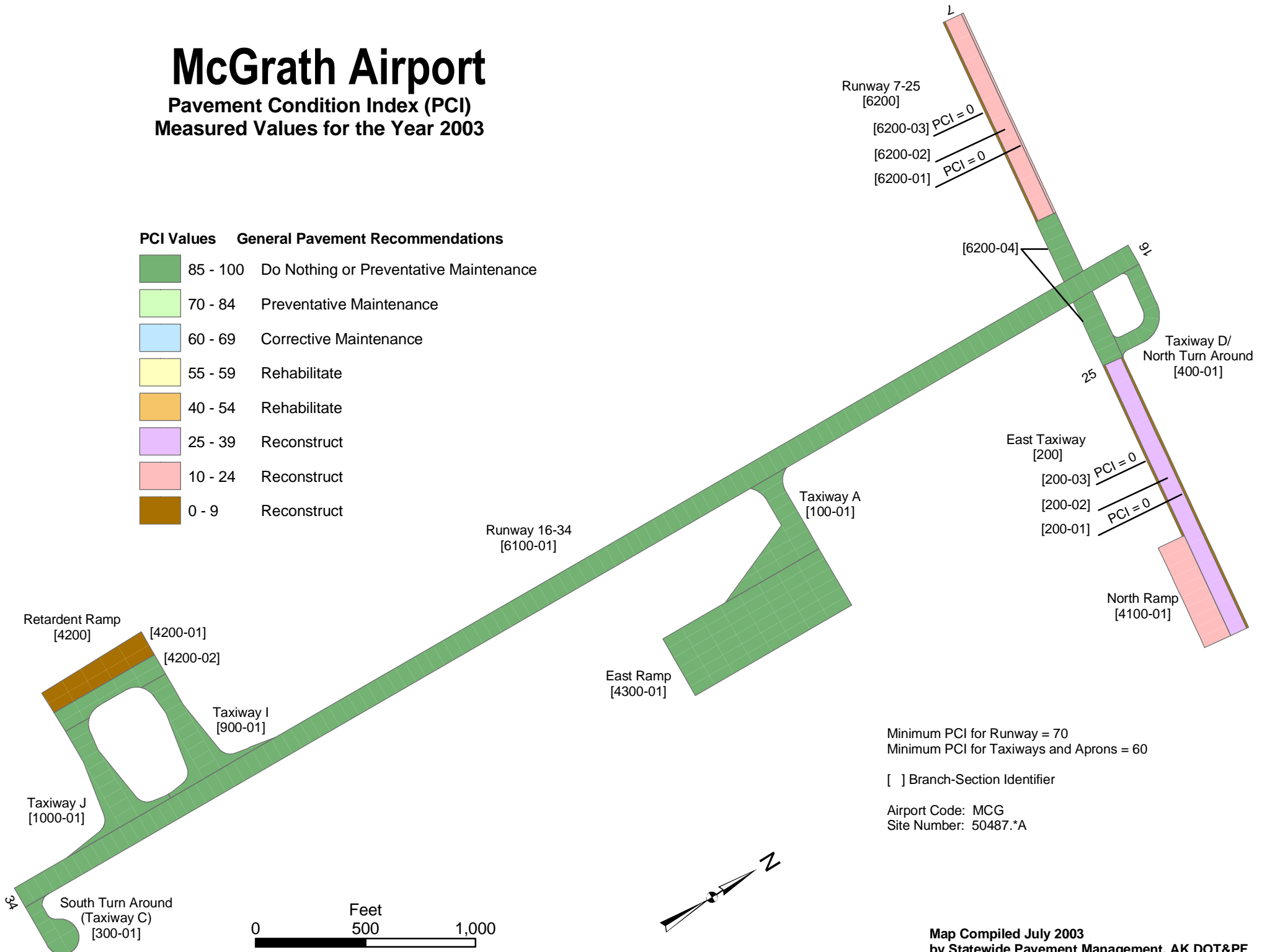
Pavement Surface Age
2004



McGrath Airport

**Pavement Condition Index (PCI)
Measured Values for the Year 2003**

PCI Values	General Pavement Recommendations
 85 - 100	Do Nothing or Preventative Maintenance
 70 - 84	Preventative Maintenance
 60 - 69	Corrective Maintenance
 55 - 59	Rehabilitate
 40 - 54	Rehabilitate
 25 - 39	Reconstruct
 10 - 24	Reconstruct
 0 - 9	Reconstruct

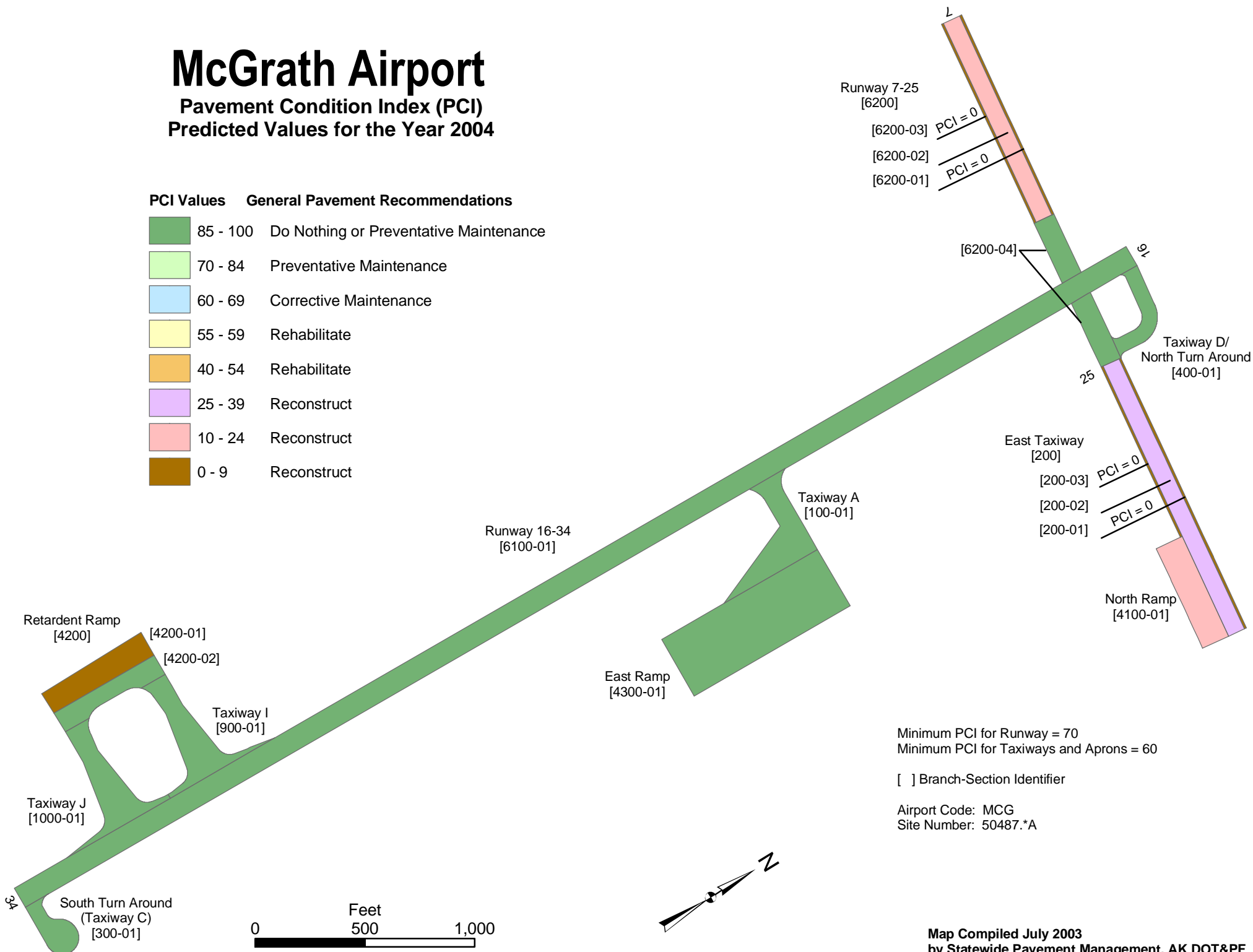


McGrath Airport

Pavement Condition Index (PCI)
Predicted Values for the Year 2004

PCI Values General Pavement Recommendations

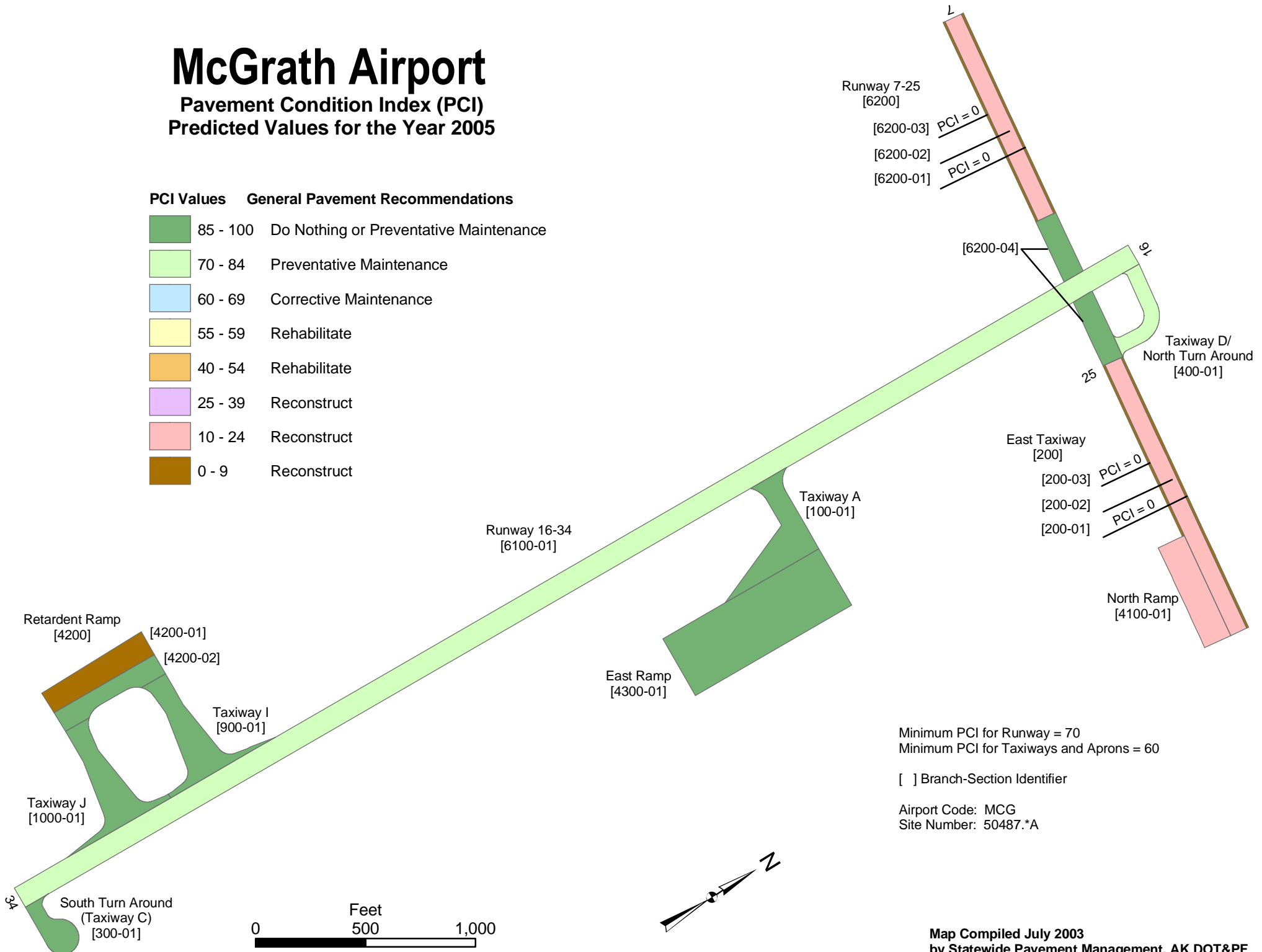
85 - 100	Do Nothing or Preventative Maintenance
70 - 84	Preventative Maintenance
60 - 69	Corrective Maintenance
55 - 59	Rehabilitate
40 - 54	Rehabilitate
25 - 39	Reconstruct
10 - 24	Reconstruct
0 - 9	Reconstruct



McGrath Airport

Pavement Condition Index (PCI)
Predicted Values for the Year 2005









PCI Values	General Pavement Recommendations
85 - 100	Do Nothing or Preventative Maintenance
70 - 84	Preventative Maintenance
60 - 69	Corrective Maintenance
55 - 59	Rehabilitate
40 - 54	Rehabilitate
25 - 39	Reconstruct
10 - 24	Reconstruct
0 - 9	Reconstruct

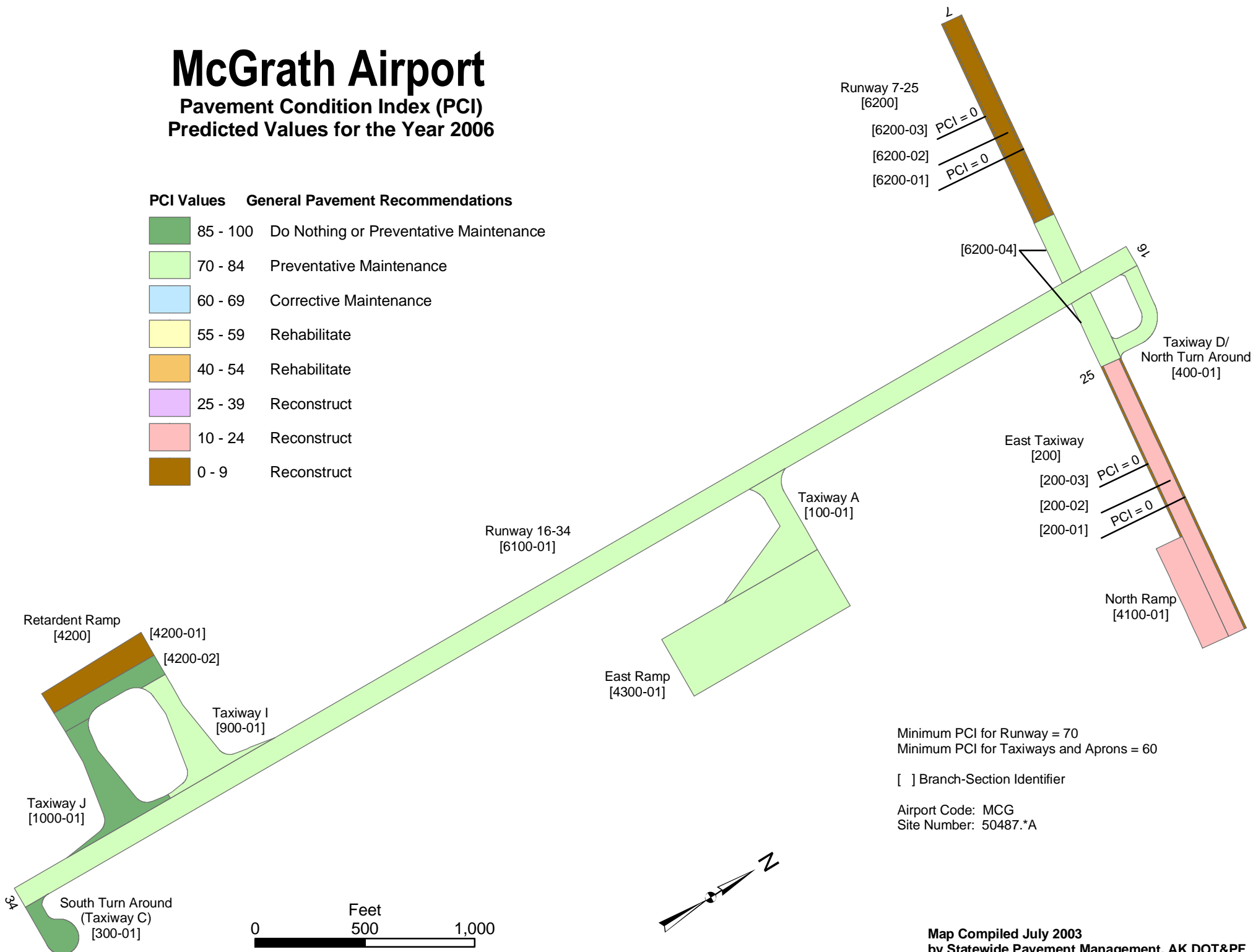


McGrath Airport

Pavement Condition Index (PCI)
Predicted Values for the Year 2006

PCI Values General Pavement Recommendations

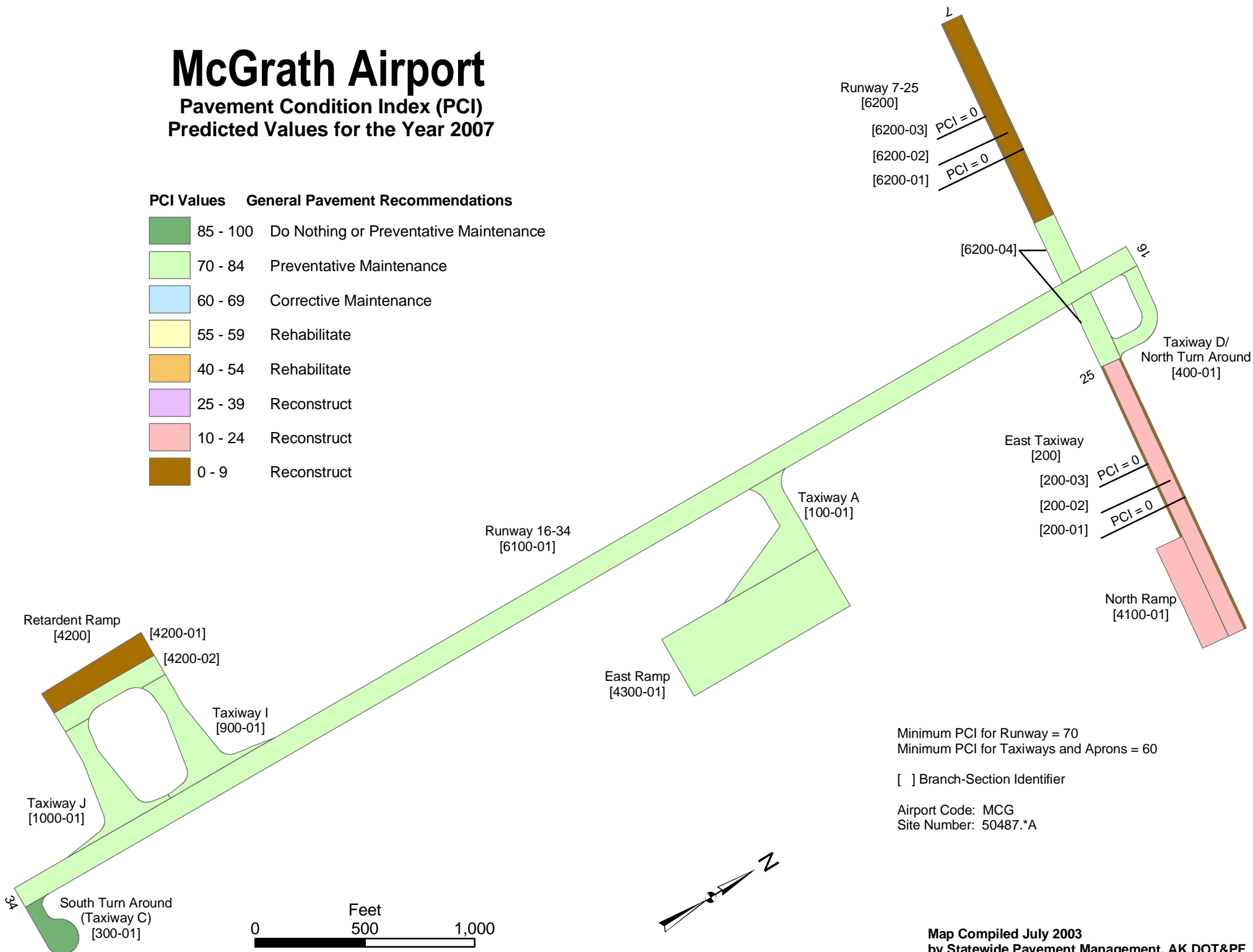
	85 - 100	Do Nothing or Preventative Maintenance
	70 - 84	Preventative Maintenance
	60 - 69	Corrective Maintenance
	55 - 59	Rehabilitate
	40 - 54	Rehabilitate
	25 - 39	Reconstruct
	10 - 24	Reconstruct
	0 - 9	Reconstruct



McGrath Airport

Pavement Condition Index (PCI)
Predicted Values for the Year 2007

PCI Values	General Pavement Recommendations
85 - 100	Do Nothing or Preventative Maintenance
70 - 84	Preventative Maintenance
60 - 69	Corrective Maintenance
55 - 59	Rehabilitate
40 - 54	Rehabilitate
25 - 39	Reconstruct
10 - 24	Reconstruct
0 - 9	Reconstruct



McGrath Airport

Pavement Condition Index (PCI)
Predicted Values for the Year 2008

PCI Values General Pavement Recommendations

85 - 100	Do Nothing or Preventative Maintenance
70 - 84	Preventative Maintenance
60 - 69	Corrective Maintenance
55 - 59	Rehabilitate
40 - 54	Rehabilitate
25 - 39	Reconstruct
10 - 24	Reconstruct
0 - 9	Reconstruct

